(a) contacting said amplification sequence with an excess of [a plurality of] at least three denatured pairs of amplification probes sufficient to drive the reaction forward, wherein the member probes of each of said pairs of amplification probes are complementary to each other and at least one same hybridizing member of each pair of probes is also complementary to a portion of said amplification sequence, said amplification sequence acting as a template sequence;

(b) allowing said hybridizing members of said amplification probes to hybridize to said amplification template sequence, with said amplification probes binding to said template sequence in a contiguous manner;

(c) ligating said hybridized amplification probes to form an amplification product;

(d) effecting separation of said amplification product from said template sequence; and,

(e) repeating steps (a) through (d), wherein said amplification product also acts as a template sequence in subsequent cycles of steps (a) through (d).

Amend claim 14 to read as follows:

14. (Three times amended) A method for detecting a [an] a known amplification sequence of a target nucleic acid sequence which may be present in a test sample comprising:

(a) contacting said test sample with an excess of at least three denatured pairs of nucleic acid amplification probes sufficient to drive the reaction forward, wherein the member probes of each of said pairs of amplification probes are complementary to each other and at least one same hybridizing member of each pair of probes is also complementary to a portion of said amplification sequence, said amplification sequence acting as a template sequence;

(b) allowing said hybridizing members of said amplification probes to hybridize to said amplification template sequence, with said amplification probes binding to said template sequence in a contiguous manner;

(c) ligating said hybridized amplification probes to form an amplification product;

(d) effecting separation of said amplification product from said template sequence;

(e) repeating steps (a) through (d), wherein said amplification sequence also acts as a template sequence in subsequent cycles of steps (a) through (d);

(f) contacting said amplification product with at least two detection probes, wherein at least one of said detection probes is labeled, and wherein each of said detection probes is complementary to a portion of each of two of said amplification probe segments which are adjacently situated in said amplification product;

(g) allowing each of said detection probes to hybridize to two adjacently situated amplification probe segments of said amplification product, with said detection probes binding to said amplification product in a contiguous manner to form a detection product;

(h) detecting the presence of said hybridized detection product through the presence of said label.

Amend claim 19 to read as follows:

19. (Twice amended) A reagent for use in the amplification of [an] a known amplification sequence comprising an excess of [a plurality of] at least three pairs of nucleic acid amplification probes sufficient to drive the reaction forward, wherein the member probes

of each pair of amplification probes are complementary to each other and at least one same hybridizing member of each pair of amplification probes is also complementary to a given portion of said amplification sequence, with the nucleic acid sequence of each pair of amplification probes selected to be complementary to said amplification sequence, said amplification sequence acting as a template sequence, the amplification probes being capable of hybridizing to the template sequence in a contiguous manner sufficiently adjacent to each other to enable the probes to be ligated to form a detection product.

Amend claim 21 to read as follows:

21. (Three times amended) A kit for use in the detection of a [an] a known amplification sequence of a target nucleic acid sequence which may be present in a test sample comprising:

(a) an excess of at least three pairs of amplification probes sufficient to drive the reaction forward, wherein the member probes of each of said pairs of amplification probes are complementary to each other and at least one same hybridizing member of each pair of amplification probes is also complementary to a portion of an amplification sequence of said target nucleic acid sequence, said amplification sequence acting as a template sequence, and said amplification probes being capable of hybridizing to said template sequence in a contiguous manner having a gap of no more than one nucleotide between said amplification probes, such that said amplification product is made up of ligated amplification probe segments; and,

(b) at least two detection probes, wherein at least one of said detection probes is labeled, and wherein each of said detection probes is complementary to a portion of each of two of said amplification probe segments of said amplification product which are adjacently situated in said amplification product, with at least one of said detection probes being provided with a label, said detection